The Sport Imagery Ability Questionnaire Manual

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The Sport Imagery Ability Questionnaire Manual

Birmingham Research in Imagery and Observation Group

About this manual: This is a guide to using the Sport Imagery Ability Questionnaire (SIAQ) with athletes. It was developed by the Birmingham Research in Imagery and Observation (BRIO) group.

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Questionnaire Information

Permission to use the Questionnaire

We invite researchers and applied practitioners to use the Sport Imagery Ability Questionnaire (SIAQ) as a tool for research and/or to aid understanding of athlete imagery ability. If you decide to use the SIAQ in its current format, we would be very pleased to be kept informed of your work and share your citation, either from a published paper or conference presentation, on our website (www.briogroupworkshop.com). If you would like to translate the SIAQ into another language, please contact Dr Sarah Williams (S.E.Williams@Bham.ac.uk) for permission.

Purpose

The SIAQ is designed to measure the ability to image different content athletes frequently use in their sport (i.e., skills, strategies, goals, feelings and emotions, and mastering difficult situations). It can be used to assess an athlete's imagery ability (i.e., ease of imaging) of this sport specific content as a one-off assessment or monitor how imagery ability may change over time.

Validity

We have conducted analyses to provide evidence of the structural validity of the questionnaire. In studies conducted to date, the SIAQ has demonstrated good content and factorial validity, and correlates well with other measures reflective of imagery ability. Below is a summary of the fit indices from previous studies examining the SIAQ's psychometric properties:

Reference	χ^2	df	CFI	TLI	SRMR	RMSEA	90% CI
Williams & Cumming (2011) Study 3	204.53*	80	.96	.95	.04	.06	0.05-0.07
Williams & Cumming (2011) Study 4	108.59*	80	.98	.97	.04	.04	0.02-0.06
Williams & Cumming (2012c)	116.87*	80	.97	.96	.04	.05	0.03-0.07

* $p < .05$

Reliability

The SIAQ has good internal reliability and good temporal stability.

Suggested Uses for the SIAQ

We think the SIAQ is an effective tool used for both research and applied purposes.

The SIAQ for Research
Validating a questionnaire is an ongoing process. We encourage other researchers to continue testing the SIAQ with different types of athletes in different situations. The SIAQ can be used as a screening tool or to explore whether higher imagery ability leads to greater effectiveness of a subsequent imagery intervention. Additionally, using more interdisciplinary techniques such as brain imaging and cardiovascular reactivity can be used with the SIAQ to investigate possible mechanisms and responses reflective of better and poorer imagers.

The SIAQ is also an ideal tool to test different hypothesis merging from the revised applied model of imagery use (Cumming & Williams, 2013).
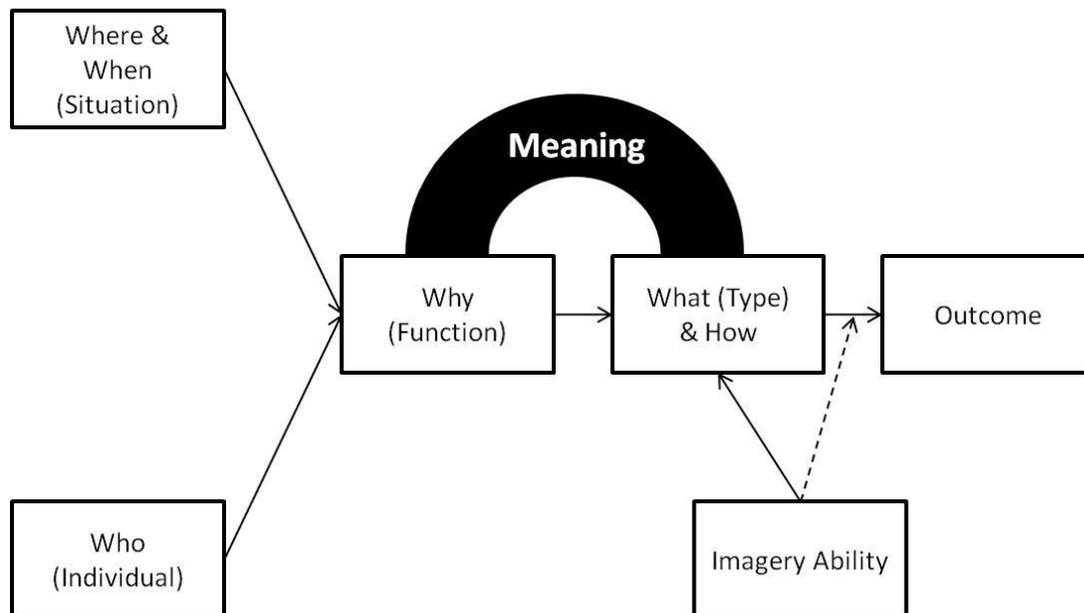

Figure reproduced with permission from Cumming & Williams (2013)

The SIAQ for Applied Work
The SIAQ is a quick and simple to use scale. Consequently, it lends itself well to applied work. It can be used to provide the practitioner with a sense of an athlete's current capabilities regarding how well they can image. The SIAQ can also be employed as a self-assessment tool for athletes. Completing the SIAQ allows an athlete to reflect on their own imagery capacity and help them better understand which content they may find easier or more difficult to image. Because the questionnaire is straight forward, it lends itself well to documenting any improvements in imagery ability as a result of any imagery practice or training exercises completed.

Instructions and Scoring

Instructions

Athletes are asked to image each item and then rate how easy they are able to image each scenario in relation to their sport.

Ratings are made on a 7-point Likert type scale ranging from 1 (very hard to image), to 7 (very easy to image). When validating the SIAQ we demonstrated that this rating is a combination of how well the athlete can see the image and how well the athlete can feel the image.

Scoring Information

We have validated the SIAQ to be scored in two different ways:

1. Separate subscales of imagery ability

Items are averaged to form five separate subscales as follows:

Skill imagery ability = Item 3 + Item 8 + Item 12 /3

Strategy imagery ability = Item 1 + Item 6 + Item 13 /3

Goal imagery ability = Item 5 + Item 9 + Item 14 /3

Affect imagery ability = Item 4 + Item 7 + Item 11 /3

Mastery Imagery Ability = Item 2 + Item 10 + Item 15 /3

2. Global measure of sport imagery ability

All 15 items are averaged to produce one score reflective of sport imagery ability as follows:

Global sport imagery ability = Item 1 + Item 2 + Item 3 + Item 4 + Item 5 + Item 6 + Item 7 + Item 8 + Item 9 + Item 10 + Item 11 + Item 12 + Item 13 + Item 14 + Item 15 / 15

Sport Imagery Ability Questionnaire

Instructions:

The purpose of this questionnaire is to obtain information about your ability to generate a number of images athletes use in relation to their sport.

For each item, bring the image to your mind with your eyes CLOSED. Then rate how easy it is for you to form this image (1 = very hard, 4 = not easy or hard to 7 = very easy). Circle the appropriate rating based on the scale provided. For example, some athletes may find imaging themselves kicking a football neither easy nor hard and therefore select 4.

Please be as accurate as possible and take as long as you feel necessary to arrive at the proper ratings for each image. There are no right or wrong answers, because we are simply interested in your response.

In relation to my sport, how easy is it for me to image…	Very hard to image	Hard to image	Somewhat hard to image	Neutral (not easy or hard)	Somewhat easy to image	Easy to image	Very easy to image
1. Making up new plans/strategies in my head	1	2	3	4	5	6	7
2. Giving 100% effort even when things are not going well	1	2	3	4	5	6	7
3. Refining a particular skill	1	2	3	4	5	6	7
4. The positive emotions I feel while doing my sport	1	2	3	4	5	6	7
5. Myself winning a medal	1	2	3	4	5	6	7
6. Alternative plans/strategies	1	2	3	4	5	6	7
7. The anticipation and excitement associated with my sport	1	2	3	4	5	6	7
8. Improving a particular skill	1	2	3	4	5	6	7
9. Being interviewed as a champion	1	2	3	4	5	6	7
10. Staying positive after a setback.	1	2	3	4	5	6	7
11. The excitement associated with performing	1	2	3	4	5	6	7
12. Making corrections to physical skills	1	2	3	4	5	6	7
13. Creating a new event/game plan	1	2	3	4	5	6	7
14. Myself winning	1	2	3	4	5	6	7
15. Remaining confident in a difficult situation	1	2	3	4	5	6	7

References

Questionnaire Reference

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